

AMENDMENTS TO THE DRAWINGS

The attached sheet of drawings includes changes to Figure 1. This sheet, which includes Figure 1, replaces the original sheet including Figure 1.

Attachment: Replacement Sheet

Annotated Sheet Showing Changes

REMARKS

Specification

Duty to Disclose

In the Office Action, the Examiner reminded the Applicants of the duty to bring to the attention of the examiner information within their knowledge as to other copending United States applications which are "material to patentability." *See* 37 C.F.R. § 1.56; M.P.E.P. § 2001.06(b).

Although Applicants do not necessarily think that these copending applications should be considered material to patentability of this case, Applicants will submit an Invention Disclosure Statement (IDS) identifying the United States applications identified by the Examiner, as well as other references associated with such applications out of an extreme abundance of caution and due to the fact that the Examiner has apparently expressed that he feels that the identified copending cases are material to patentability.¹

The Examiner has stated that the specification of the present application must also be amended to identify the identified copending applications. Applicants respectfully disagree.

As noted in M.P.E.P. § 2001.06(b), the duty of disclosure under 37 C.F.R. § 1.56, with respect to copending applications, is to "bring such other applications to the attention of the examiner." M.P.E.P. § 2001.06(b). Applicants have not found, and Examiner has not cited, any requirement under which copending applications must also be identified in the specification. Accordingly, the specification has not been amended as requested by the Examiner. However, Applicants specifically call the Examiner's attention to the U.S. Patent Ser. Nos. 10/764,787, 10/764,745, and 10/764,622, and the other references identified in the IDS submitted on September 23, 2005.

Paragraph [0022]

The Examiner objected to the specification because of the description of the "circularly dependent constrain" recited in paragraph [0022]. Specifically, the Examiner stated that the "Examiner fails to understand, and one of ordinary skill and the art would fail to understand how

¹ Applicants note, for the record, that they do not believe the copending applications are, in fact, material to patentability, inasmuch as the other references do not qualify as prior art (having been filed on the same day) and do not present claims that are patentably indistinct. Nonetheless, out of the abundance of caution suggested in M.P.E.P. § 2004, ¶ 9 (i.e. recommending calling the Examiner's attention even if a reference only "might" be material to patentability), Applicants specifically call the Examiner's attention to the references noted in the IDS that will be submitted at or about the same time as this response. Nevertheless, submission of the IDS should not be construed as Applicants' acquiescence that such applications and references are, in fact, material to patentability of the present application.

such a constraint...would be circularly dependent." Amendments have been made in accordance with the Examiner's suggestion to clarify the circular dependency. Note that no new matter has been added, as the clarification is simply a restatement of paragraph [0041] of the present application.

Paragraph [0033]

The Examiner objected to paragraph [0033] stating that "it is not made clear that the computing system 118 generates control points 132 that contain the modified rules referred to therein (e.g. the instructions to design control points 122 and the like). Applicants are not entirely sure what is intended by the Examiner's objection. Applicants point out however that the specification describes that a "computer architecture 100 [that includes a] computing system 118 [that] includes hinting module 119." (Paragraph [0029]). The specification as written further notes that "hinting module 119 (part of computing system 118 in the example shown) receives a set of control points (e.g. design control points 122) representing a graphical object (graphical object 131)." (Id.) The [h]int application module 129 (part of hinting module 119 which is a part of the computing system 118 in the example shown) can add hints...to design control points 122...." (Paragraph [0033]. Finally, "hinted control points (e.g. control points 132) [represent] the outline of a graphical object at a larger size. (Paragraph [0034]). By reading the text above in context with Figure 1, applicants submit that the operations defining control points 132 are clearly illustrated.

Drawings

The Examiner objected to the drawings stating that "Figure 1 does not show that computing system 118 outputs control points 132. There should be an arrow there, as there clearly is indicated that design control points 122 are put into computing system 118, and where there is an arrow indicating that control points 132 are put into computing system 123." Corrected drawings are attached hereto with the Examiner's suggested corrections.

Claim Objections

The Examiner objected to claims 1 and 20 because of the use of "can not" and requested that instead the word "cannot" be substituted. The Examiner's suggested corrections have been made to claims 1 and 20.

The Examiner noted that no claim 5 was included in the application. Applicants thank the Examiner for his careful review of the application. Claim 5 has been added as shown above.

Claim Rejections

The Office Action mailed July 26, 2005 considered and rejected claims 1-4, 6-13 and 16-20 and objected to claims 14 and 15.² By this response, claims 1, 11, 15 and 20 have been amended³, claim 14 has been cancelled and new claim 5 has been added such that claims 1-13 and 15-20 remain pending.

35 U.S.C. 112 Rejections

Claims 1 and 20 were rejected under 35 U.S.C. 112. Specifically, the Examiner stated that “[c]laims 1 and 20 use the language “can be” in the last clause of the claim, and thus renders the claim indefinite because it is unknown to what extent iterative processing is required or not, and further the nature of such processing, and how it is determined whether or not it is necessary.” Claims 1 and 20 now read: “representing each of the simpler constraints in corresponding font-hinting language instructions that are iteratively processed to at least approximate a solution to the more complex constraint.” Applicants therefore respectfully request that the Examiner withdraw the rejection to claims 1 and 20 under 35 U.S.C. 112.

35 U.S.C. 103 Rejections

Claims 1 and 20 of the present application are directed towards identifying graphical objects with control points that expressly represent strokes of the graphical objects which can be described by a set of complex constraints, and simplifying the complex constraints into a number of simpler constraints so that the graphical object can be represented in constraints that can be natively expressed based on the vocabulary of a font-hinting language. For example, claim 1 as amended recites a method for using a font-hinting language to represent an iterative solution to a constraint. The method may be practiced, for example, in a computing system that has access to a set of control points. The set of control points are used to generate an outline of a graphical

² Claims 1 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1-2, 7, 9-11, 13, and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stamm (US 6,249,980 B1)(‘Stamm’) in view of Collins et al (US 5,817,714 A)(‘Collins’) and DeRose et al (US PGPub 2001/0002131 A1)(‘DeRose’). Claim 3 is rejected as unpatentable over Stamm in view of Collins and DeRose as applied to claim 1, and further in view of Rappoport et al (WO 98/36630)(‘Rappoport’). Claims 6 and 12 are rejected under 35 U.S.C. 103(a) as unpatentable over Stamm in view of Collins and DeRose as applied to claim 1 above, and further in view of Weisstein (Weisstein, Eric W. “Taylor Series”. From *MathWorld-A Wolfram Web Resource*, 1999). Although the prior art status of the cited art is not being challenged at this time, Applicants reserve the right to challenge the prior art status of the cited art at any appropriate time, should it arise. Accordingly, any arguments and amendments made herein should not be construed as acquiescing to any prior art status of the cited art.

³ Support for amendments can be found throughout applicants’ specification, but particularly at paragraphs [0030] and [0059].

object. The outline is used to determine how the graphical object is rendered. The method includes *identifying features of the graphical object represented by a set of control points expressly representing strokes to identify a more complex constraint that cannot be natively expressed based on the vocabulary of the font hinting language*. The more complex constraints that cannot be natively expressed based on the vocabulary of the font-hinting language are accessed. The more complex constraint constrains at least a portion of the outline. The more complex constraint is decomposed into a plurality of simpler constraints that can be natively expressed based on the vocabulary of the font-hinting language. Each of the simpler constraints is represented in corresponding font-hinting language instructions that are iteratively processed to at least approximate a solution to the more complex constraint.

Claim 20 is similar to claim 1. Claim 20, however, is directed to a computer program product that facilitates performing the acts of claim 1.

Stamm, Collins and *DeRose* fail to disclose or suggest, alone or in combination, what is recited by the claims of the present application. *Stamm, Collins* and *DeRose* fail to disclose or suggest “identifying features of the graphical object represented by a set of control points expressly representing strokes to identify more complex constraints that cannot be natively expressed based on the vocabulary of the font hinting language” as is recited by claims 1 and 20.

Rather, *Stamm* discloses compiling high-level hinting instructions into TrueType instructions. *Stamm* at col. 8, lines 20-21. Thus rather than identifying features of the graphical object represented by a set of control points *expressly representing strokes*, *Stamm* teaches compiling from one already hinted representation to a second hinted representation.

Collins does not compensate. *Collins* does not show identifying features, but rather illustrates instructions being converted from one language to another. For Example, *Collins* teaches in claim 1 generating font descriptions from one language to another. *Collins* at col. 47, lines 35-39.

DeRose does not compensate for *Stamm* and *Collins* and is cited by the Examiner for showing Energy Reduction equations.

Rappoport and *Weisstein* are cited to show various limitations in the dependent claims, but do not compensate for what is not taught by *Stamm, Collins* and *DeRose*.

Claim 11 has been amended to include the limitations of claim 14 and is therefore allowable as stated by the Examiner at page 20 of the Office Action.

Furthermore, although the foregoing remarks have been focused primarily on the independent claims, it will be appreciated that all of the rejections and assertions of record with respect to the independent claims, as well as the dependent claims, are now moot, and therefore need not be addressed individually. However, in this regard, it should be appreciated that Applicant does not necessarily acquiesce to any assertions in the previous Office Action that are not specifically addressed above, and hereby reserves the right to challenge those assertions at any appropriate time in the future, should it arise, including any official notice.

In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney.

Dated this 26 day of October, 2005.

Respectfully submitted,



RICK D. NYDEGGER
Registration No. 28,651
J. LAVAR OLDHAM
Registration No. 53,409
Attorneys for Applicant
Customer No. 47973

JLO:crb
CRB0000000295V001



Title: ITERATIVELY SOLVING CONSTRAINTS IN A FONT-HINTING LANGUAGE
Inventors: Beat Stamm, Gregory C. Hitchcock and Michael J. Duggan
Docket No.: 14984.34

1 / 3

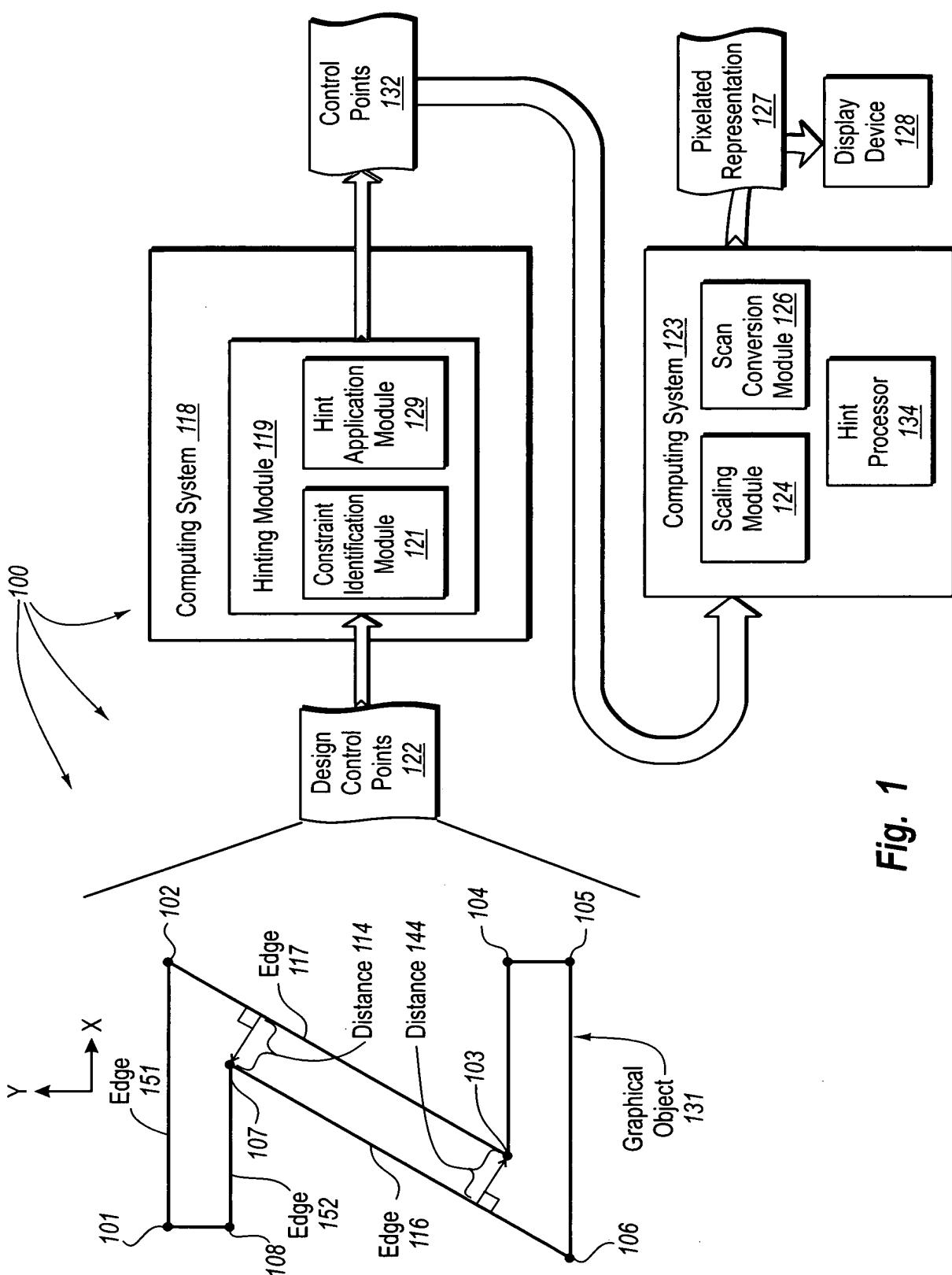


Fig. 1